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10-248 40.84 FACT. PRICE

## LEM Model LA 25-NP

### Definition

The LEM Model LA 25-NP is a multi-range current transducer for the electronic measurement of currents (DC, AC and pulsed) with galvanic isolation between the primary (measured) and the analog output (control) signal.

### Electrical Data

Nominal Current $I_N$	:	25 At rms
Measuring Range	:	0 to $\pm 36$ At
Measuring Resistance	:	$R_M$ min. $R_M$ max.
with $\pm 15$ V	at $\pm 25$ A max	: 100 Ohms      320 Ohms
	at $\pm 36$ A max	: 100 Ohms      190 Ohms
Nominal Analog Output Current	:	25 mA
Turns Ratio	:	1-2-3-4-5 : 1000
Overall Accuracy at $+25^\circ\text{C}$	:	$\pm 0.6\%$ of $I_N$
Supply Voltage	:	+ and - 15 V ( $\pm 5\%$ )
Isolation	:	2.5kV rms/50Hz/1 min

### Accuracy - Dynamic Performance

	Typical	Maximum
Zero Offset Current at $+25^\circ\text{C}$	: $\pm 0.02$ mA	$\pm 0.05$ mA
Residual current after overload of $3 \times I_N^*$	: $\pm 0.05$ mA	$\pm 0.15$ mA
Thermal Drift of Offset Current	:	
(between $0^\circ\text{C}$ and $+25^\circ\text{C}$ )	: $\pm 0.06$ mA	$\pm 0.25$ mA
(between $+25^\circ\text{C}$ and $+70^\circ\text{C}$ )	: $\pm 0.1$ mA	$\pm 0.35$ mA
Linearity	:	better than 0.2%
Response Time	:	better than 1 $\mu\text{s}$
Bandwidth	:	0 to 150 kHz (-1dB)

### General Data

Operating Temperature	:	$0^\circ\text{C}$ to $+70^\circ\text{C}$
Storage Temperature	:	$-25^\circ\text{C}$ to $+85^\circ\text{C}$
Current Consumption	:	10 mA + output current
Secondary Internal Resistance	:	110 ohms (at $+70^\circ\text{C}$ )
Primary Internal Resistance	:	< 1.25 mohm/turn
Isolation Resistance	:	> 1500 Mohm (at 500V and $+25^\circ\text{C}$ )
Weight	:	22 grams
Fastening	:	potted in insulated self-extinguishing plastic case
Polarity	:	A positive measuring current is obtained on the output when the primary current flows from terminals 1,2,3,4 and 5 to terminals 10, 9, 8, 7 and 6

Notes

- This is a standard model; for different versions (e.g. supply voltage, turns ratio, mechanical dimensions, unidirectional measurement, etc.) please contact us.
- \* Result of the coercive field of the magnetic circuit

Patent Pending

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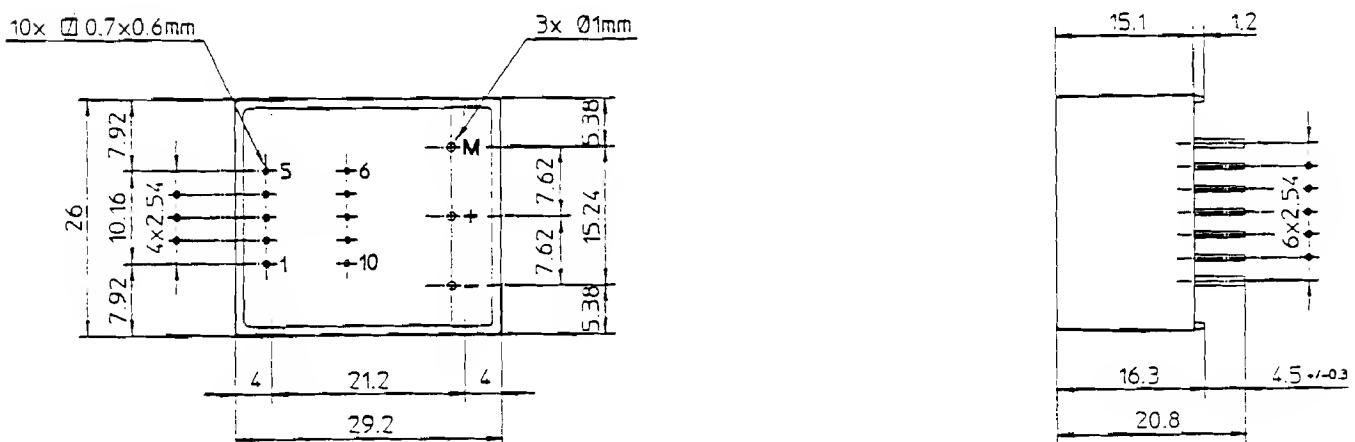
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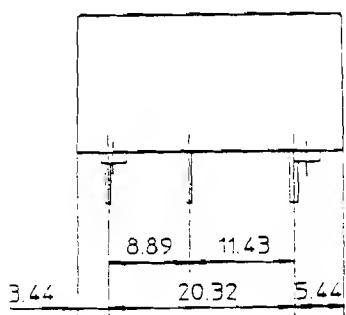
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Number of primary turns	Primary current		Nominal output current $I_s$ [mA]	Turn ratio	Primary resistance [mOhm]	Primary insertion inductance [ $\mu$ H]	Recommended connections
	nominal $I_p$ [A]	maximum $I_p$ [A]					
1	25	36	25	1/1000	0.3	0.023	5 4 3 2 1 IN OUT 6 7 8 9 10
2	12	18	24	2/1000	1.1	0.09	5 4 3 2 1 IN OUT 6 7 8 9 10
3	8	12	24	3/1000	2.5	0.21	5 4 3 2 1 IN OUT 6 7 8 9 10
4	6	9	24	4/1000	4.4	0.37	5 4 3 2 1 IN OUT 6 7 8 9 10
5	5	7	25	5/1000	6.3	0.58	5 4 3 2 1 IN OUT 6 7 8 9 10



Recommended PCB hole diam. :  $\varnothing$  1.2 mm



### Connection

